

territorial activity in evidence. At about 11.45, Mick Groom and Vince Lea observed a Black Hairstreak settle on a Blackthorn *Prunus spinosa* bush at around 3m above ground level, on the sunny side of a ride. A second Black Hairstreak flew past, but instead of being evicted in the typical high speed vertical chase that normally seems to follow such a meeting, the pair flew much closer together in a short upward spiral. They ascended for only 50 cms or so before landing together on the same bush. They repeated this brief dance and settled again on the outside of the bush. Shortly after this, they flew close together deep into the middle of the bush, but fortunately still in view from one angle – the bush was relatively open-centred, and a spot of sunlight penetrated to their perching position. We initially followed them to this spot using binoculars, and the sun-spot helped us to get a visual fix on the location. It was then possible to train a tripod-mounted telescope onto the spot, such that all members of the party could observe the pair.

The pair stood side-by-side on a leaf to start with, then one butterfly turned round, and they joined together in the typical lepidopteran mating position of back-to-back. They moved slightly during the 25 minute copulation, changing angle from about 180 degrees apart to perhaps 140 degrees, but otherwise they remained in the same position. After separation, one of the butterflies flew off immediately and was lost from sight. The second butterfly turned around on the spot, walked onto a different leaf, cleaned its antennae for a short while, then flew off after about 5 minutes.

The scarcity, habits and habitat, mean that observing courtship of this species is always going to be difficult. The brevity of the courtship and the inaccessible location chosen for the prolonged mating would, if typical, further explain why this behaviour has not, as far as I know, been reported in the literature before. Black Hairstreak have a notoriously short emergence period as adults, and this mating occurred four or five days after the first individuals were seen at this site, suggesting that females may be mated soon after emergence, after which they presumably spend time egg-laying or feeding.

My thanks must go to Dr Robin Field, Cambs & Essex Butterfly Conservation, and to the dedicated members of the Glapthorn Cow Pastures reserve, who gave us an excellent insight to their work.— VINCE LEA, 236 Wimpole Road, Barton, Cambridge, Cambridgeshire CB3 7AE (Email: vincelea@btinternet.com).

### **Do all Glow-worms light up early ?**

As a result of a recent observation in North Wales I found the observations of Tim Gardiner (2006. Effect of survey start time on counts of the Glow-worm, *Lampyrus noctiluca* (Col., Lampyridae) *Ent. Rec.* **118**: 184 -185) rather intriguing. I wonder about the reliability of his assertion that glow-worms all light up prior to midnight. On the evening of 20/21 July 2006 a colleague and I ran two lights over sheets for recording moths at Fedw Fawr, Anglesey (O.S. grid reference SH 6081). The two lights were nearly 70 yards apart and effectively out of sight of each other. The track between the two lights was well-trodden so regular visits from one to the other

without a torch was fairly straight forward. It was a warm night and produced a list of some 90 species of Lepidoptera. Only two glow-worms were seen on the track between the lights and both revealed themselves just before we packed up for the night at about 01.30 hours. Both started glowing at approximately 01.15 hours and were still illuminated when we left at about 01.30 hours. Were these just very late starters or do Welsh ones behave differently? — K. P. BLAND, National Museums of Scotland, The Granton Centre, 242 West Granton Road, Edinburgh EH5 1JH.

### **News on the conservation of some moths listed in UK Biodiversity Action Plan and some other nationally scarce moths in 2005**

This article follows in the foot-steps of similar annual reviews since 2000 in which the author has reported on some species and projects with which he is personally involved, in most cases to achieve the objectives and targets of the UK Biodiversity Action Plan (see *Ent. Rec.* **113**: 121-129 (for 2000), **114**: 149-153 (for 2001) **115**: 213-219 (for 2002), **116**: 134-137 (for 2003) and **117**: 111-124 (for 2004)). For brevity only selected highlights and key results from 2005 are included. In every case the author is indebted to Writtle College for support in writing up these results in his post as Reader within the Centre for Environment and Rural Affairs at the College and in some cases for financial help in conducting aspects of the fieldwork. Other partners and colleagues are acknowledged within each section and I am most thankful to all of them. Private land-owners and some others are generally not named, for reasons of privacy and security, but their help is also greatly appreciated. Where indicated, the studies are part of Butterfly Conservation's Action for Threatened Moths Project, which is part funded by English Nature, and the author is indebted to nominated officers Mark Parsons (BC) and David Sheppard (EN) for helping to ensure continued funding. Other aspects of the Action for Threatened Moths Project are reported elsewhere, in particular in the Lepidoptera Conservation Bulletin, issued annually by BC, which continues the National Moth Conservation Project News Bulletin which the author started in 1987 and which ran to ten issues, the last in 1999.

**Barberry Carpet** *Pareulype berberata* (D. & S.). Baseline monitoring of the known wild populations and the recently established colonies of the Barberry Carpet moth *Pareulype berberata* was continued in 2005, as in all previous years since 1995. This was principally by the author as part of his continuing project supported by Writtle College, but with invaluable assistance from a number of volunteers, some associated with the work since it was part of the English Nature Species Recovery Programme (1995-1999) and also previously since the author started working on the species in 1987. Larval populations of the moth appear stable at most of the various sites in Wiltshire, with definite recovery this year from previous over-zealous hedge-trimming at two of these sites. Larvae were also found at the single known site in Gloucestershire which has been monitored almost annually since larvae were first discovered there in 1988 (see *Ent. Rec.*